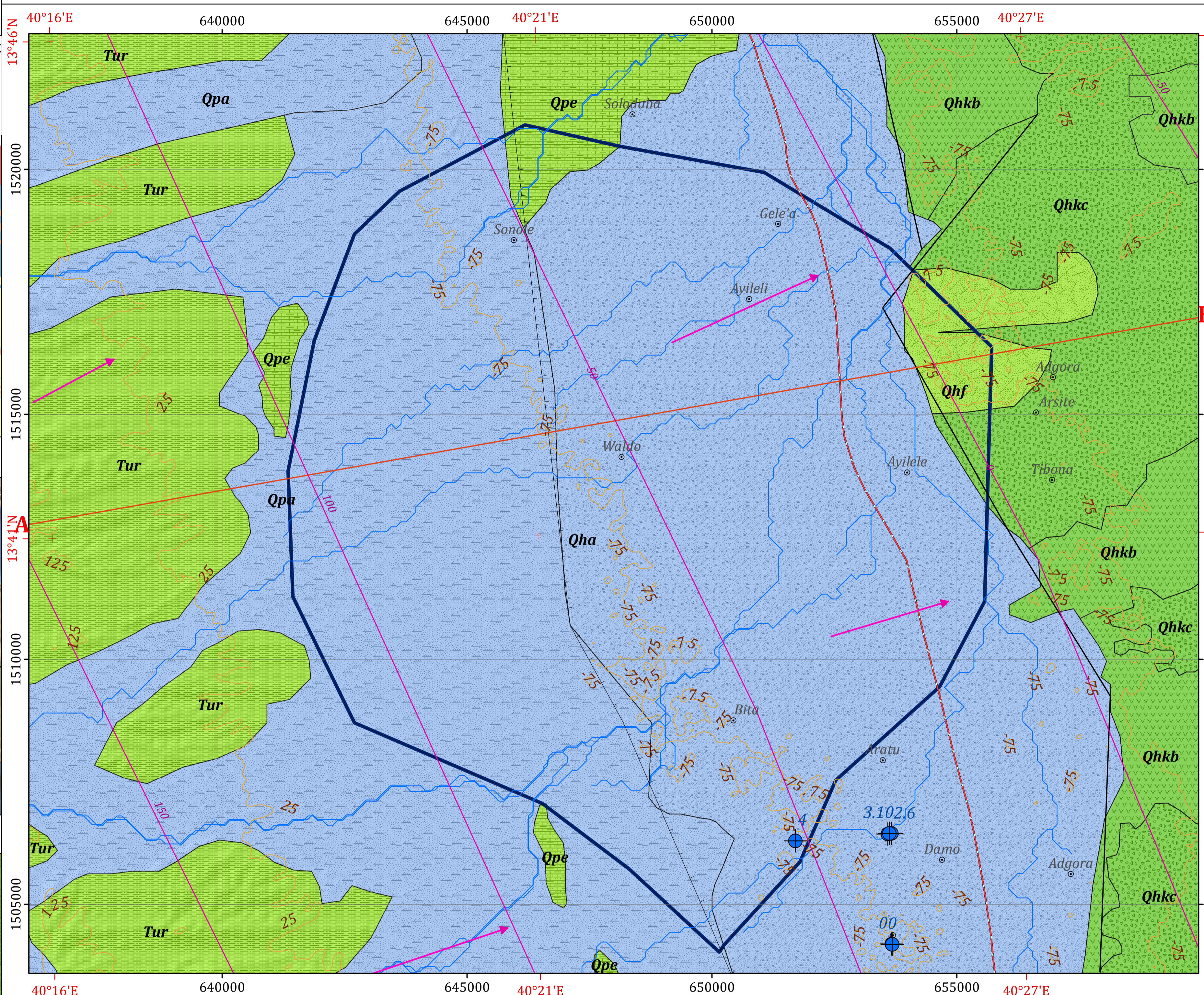
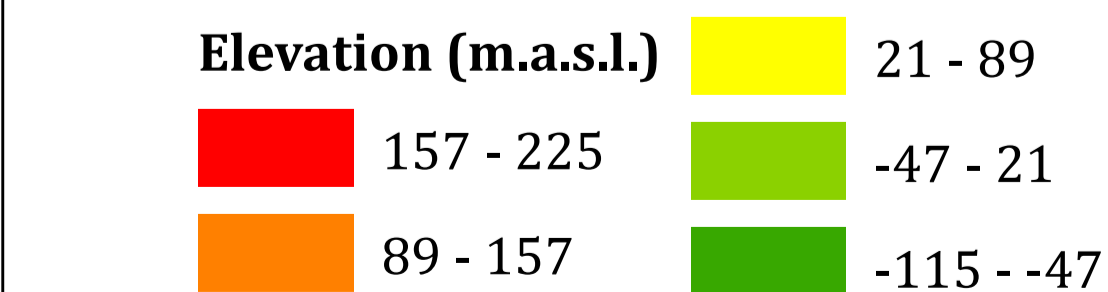
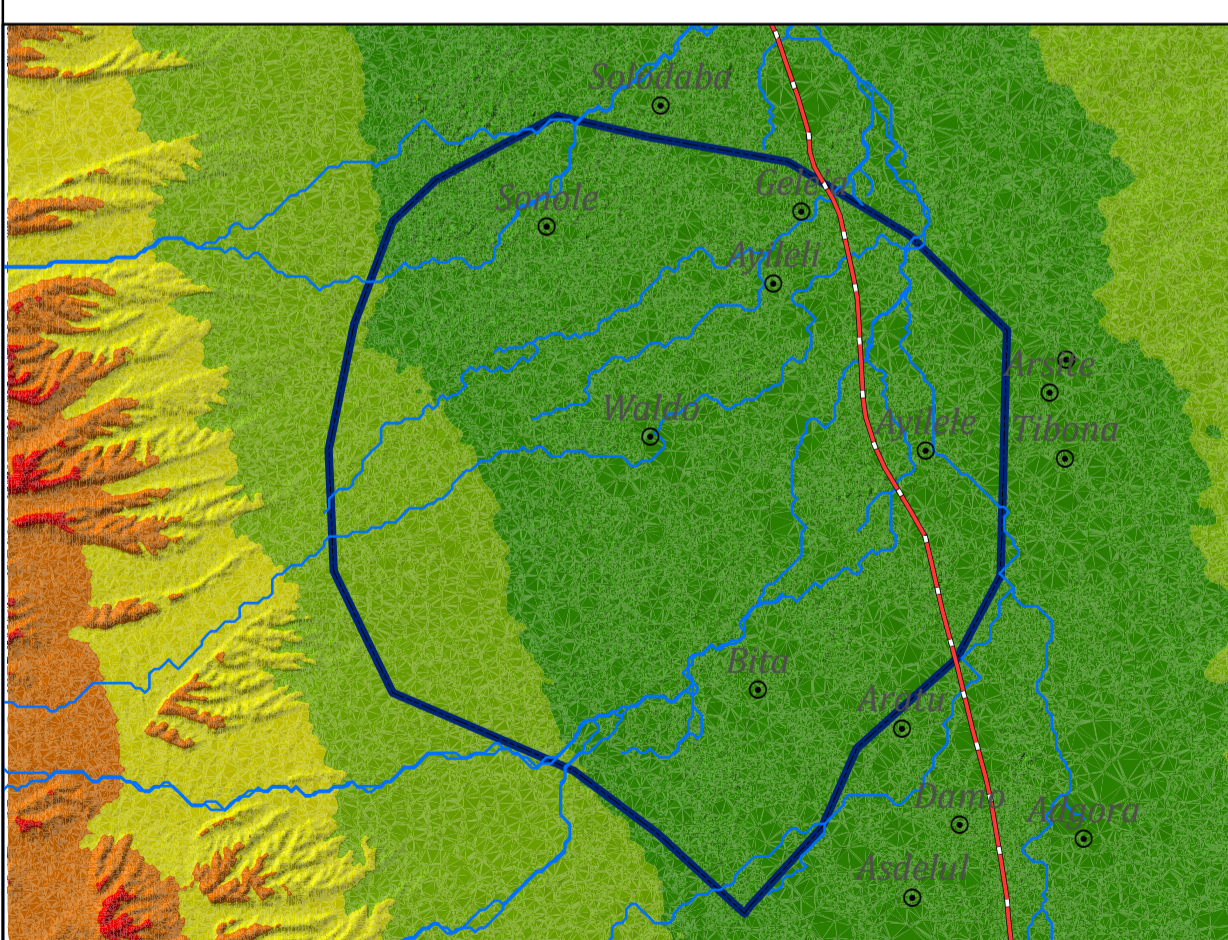
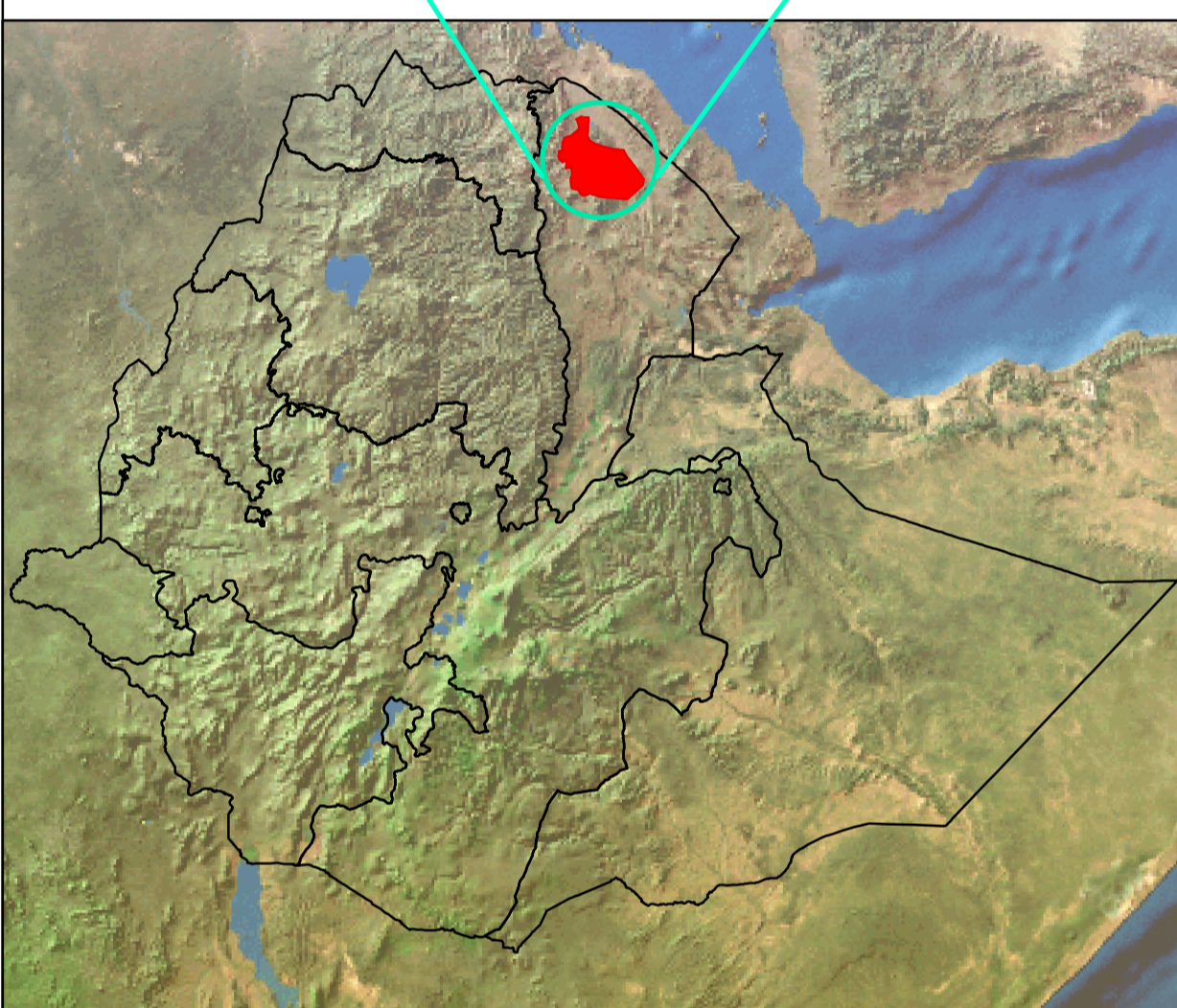
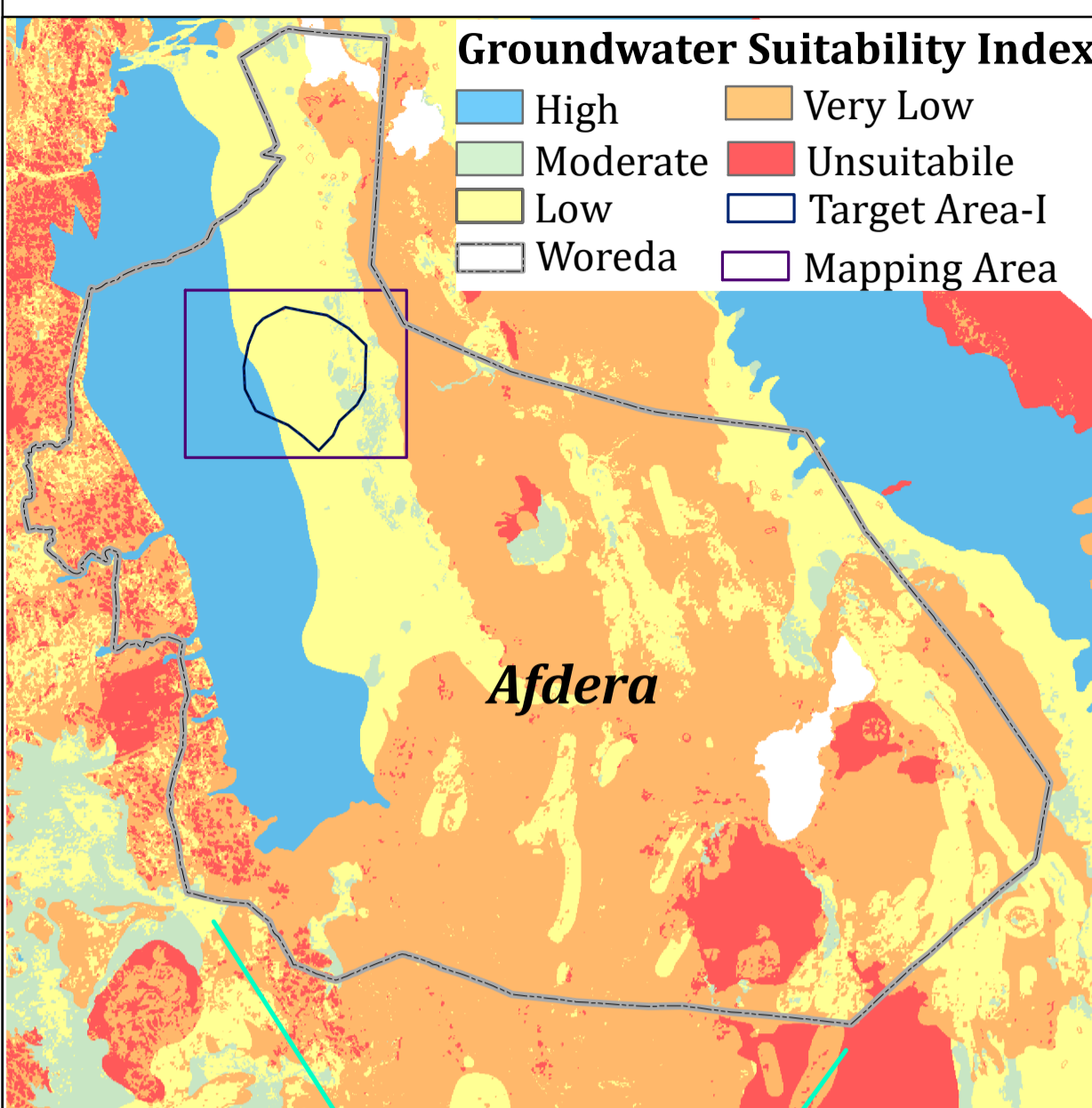


INSET MAPS

HYDROGEOLOGICAL MAP OF TARGET AREA-I WITHIN AFDERA WOREDA

Legend

Groundwater Potential Map



AQUIFER CLASSIFICATION

- Aquifer class-I:** Highly productive aquifers ($T = 10.1-100 \text{ m}^2/\text{d}$, $q = 1.1-10 \text{ l/s}\cdot\text{m}$, $Q = 5-25 \text{ l/s}$ for wells and/or springs) developed in the basaltic lava flows and cinder cones locally extremely productive where recharge and topographic positions are favorable
- Aquifer class-II:** Highly productive porous shallow aquifers ($T = 10-100 \text{ m}^2/\text{d}$, $q = 1-10 \text{ l/s}\cdot\text{m}$, $Q = 5-25 \text{ l/s}$ for wells and/or springs) or locally extremely productive aquifers
- Aquifer class-III:** Moderately productive fissured /karst aquifers ($T = 1-10 \text{ m}^2/\text{d}$, $q = 0.01-1 \text{ l/s}\cdot\text{m}$, $Q = 0.5-5 \text{ l/s}$ for wells and locally highly productive aquifers in fracture zones and karsts)

LITHOSTRATIGRAPHIC UNITS

- Qha** Sheet flood terrace: Silt, sand and gravel
- Qpa** Didikma Formation: Dolomite interbedded with slate
- Qhf** Gypsiferous and calcareous sediments
- Qpe** Enkalfo Formation (Marine Sediments)
- Qhkc** Basaltic lava and associated cinder cones
- Qhkb** Basic to intermediate lavas and cinder cones
- Tur** Conglomerate, sandstone, silt and clay

GEOLOGICAL STRUCTURES

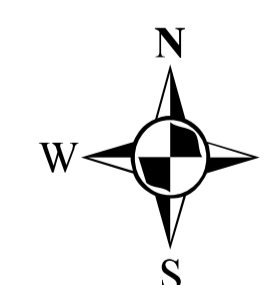
- Normal fault
- Normal fault (inferred)

OTHER SYMBOLS

- Locality
- Borehole (SWL (m.b.s.l.))
- Contour Line (25 m Interval)
- Main Road
- Drainage
- Groundwater Contour
- Flow Direction
- Cross Section Line (A-B)
- Target Area-I

Horizontal Datum: WGS 1984
 Vertical Datum: Mean sea level
 Projection: Universal Transverse Mercator, Zone 37N

Scale: 1:50,000



HYDROGEOLOGICAL MAPPING FOR CLIMATE RESILIENT WASH IN ETHIOPIA - LOT-1



Hydrogeological map production : Dr. Dessie N. & Shiferaw L.
 Geological map production : Dr. Tarekgn T. & Dr. Yohannes D.
 Cartography:- Assaminew G.

February, 2022

Disclaimer:
 Administrative boundaries: CSA 2007
 Built-up areas: Sentinel-2, Openstreetmap 2021

